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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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11/07/2006

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EXAMINER

MEJIA, ANTHONY

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,950	Applicant(s) BUCHNER ET AL.	
	Examiner ANTHONY MEJIA	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/07/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 22 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :05/22/2006, 06/15/2006, 08/22/2007.

DETAILED ACTION

1. Claims 11-20 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hooker et al. (US 2004/0044816) (referred herein after as Hooker) in further view of Primm et al. (US 2002/0124081) (referred herein after as Primm) and yet in further view of Roy et al. (US 2002/0188759)

Regarding Claim 11, Hooker teaches a method for determining an interruption (e.g., diagnostic function, par [0065-0066]) of a communication connection between a domestic appliance (e.g., network appliance 102) connected in a local area network (e.g., network area carrier 101) to which further domestic appliances (e.g., more than one network appliance may be coupled, par [0024]) are connected, to a bus line arrangement (e.g., serial bus 112) comprising a bus line controller (e.g., appliance communication controller 104), (par [0016]-[0018] and see fig.1) comprising the steps of:

transmitting information to the bus line controller (e.g., appliance communication controller 104) about an appliance status of the domestic appliance (e.g., appliance 102), par [0020]);

allocating (assigning) the domestic appliance a unique address for identification of the domestic appliance (e.g., network appliance 102) in the local area network (e.g., par [0055] and see table 6).

repeatedly requesting a specific fixed criterion (e.g., status parameters) of the domestic appliance over time by the bus line controller if the information includes change information on the appliance status (par [0008, 0067 and 0072]).

transmitting a reply signal (e.g., acknowledgement (ACK) response) from the domestic appliance to the bus line controller location if the communication connection exists between the domestic appliance and the bus line controller (par [0009-0010], and [0042]).

Hooker does not explicitly teach wherein the step of transmitting a reply signal from the domestic appliance to the bus line controller location if the communication connection exists between the domestic appliance and the bus line controller , *an absence of the reply signal being interpreted as an interruption of the communication connection with the domestic appliance.*

However, Primm in a similar field of endeavor discloses a method and system for a set of network appliances including the step of transmitting a reply signal (ping) from the domestic appliance (Primm: e.g., network appliance) to the bus line controller

(Primm: e.g., remote monitoring location (Primm: e.g., remote monitoring system) if the communication connection exists between the domestic appliance and the bus line controller, and wherein an absence of the reply signal (e.g., not receiving expected ping) being interpreted as an interruption (failure) of the communication connection with the domestic appliance (Primm: par [0061]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Primm in Hooker in order to constantly identify failures of the appliances being monitored. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Hooker and Primm to enable the users of the system in being able to also determine possible sensor failures as well.

The combined teachings of Hooker and Primm do not explicitly teach wherein in the absence of a reply signal results in a performance of a search operation for the domestic appliance, and the search operation including the steps of: transmitting a general interrogation signal from the bus line controller to the domestic appliance until the reply signal is received from the domestic appliance again; and subsequently transmitting further information corresponding to a then valid current status of the domestic appliance to the bus line controller.

However, Roy in a similar field of endeavor discloses a system for locating a network device including the step of performing a search operation (e.g., device discovery task/device location protocol) for a domestic appliance (e.g., network devices 45), the search operation further includes the steps of:

transmitting a general interrogation signal (request) from the bus line controller (e.g., management station 5, which has an HTTP server) to the domestic appliance (e.g., network devices 45) until the reply signal (e.g., process responses until no more responses are received) is received from the domestic appliance again (par [0012], and see fig.2); and

subsequently transmitting further information (e.g., SNMP information includes device name, model, and status, par [0026]) corresponding to a then valid current status of the domestic appliance to the bus line controller (par [0044], and see fig.6 and fig.7).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize the teachings of Roy in Hooker/Primm to be able to have a more faster and exhaustive search, and to be able to maintain current information of the network. One of ordinary skill in the art would have been motivated to combine the teachings of Hooker/Primm and Roy to help optimize the reliability of the network.

Regarding Claim 12, the combined teachings of Hooker/Primm/Roy teach the method according to claim 11 as described above. The combined teachings of Hooker/Primm/Roy further teach wherein requesting the specific fixed criterion of the domestic appliance cyclically (Hooker: (par [0008, 0067 and 0072])).

Regarding Claim 13, the combined teachings of Hooker/Primm/Roy teach the method according to claim 11 as described above. The combined teachings of

Hooker/Primm/Roy further teach wherein the appliance status is the specific fixed criterion of the domestic appliance (Hooker: (par [0008, 0067 and 0072])).

Regarding Claim 14, the combined teachings of Hooker/Primm/Roy teach the method according to claim 11 as described above. The combined teachings of Hooker/Primm/Roy further teach wherein carrying out the search operation cyclically (Roy: e.g., process is repeated, par [0012])).

Regarding Claim 15, the combined teachings of Hooker/Primm/Roy teach the method according to claim 11 as described above. The combined teachings of Hooker/Primm/Roy further teach wherein transmitting a current status of the domestic appliance to the bus line controller only after the domestic appliance has been allocated the unique address in the local area network via a registration procedure (Roy: e.g., information is extracted from the various network devices and the devices are then added to a list, par [0027] and [0045])).

Regarding Claim 16, the combined teachings of Hooker/Primm/Roy teach a device (Hooker: e.g., appliance communication controller 104) for determining an interruption (Hooker: e.g., diagnostic function, par [0065-0066]) of a communication connection between a domestic appliance (Hooker: e.g., network appliance 102) connected in a local area network (Hooker: e.g., network area carrier 101) to which

further domestic appliances (Hooker: e.g., more than one network appliance may be coupled, par [0024]) are connected (Hooker: par [0016-0018], and see fig.1), the device comprising:

a bus line configuration (Hooker: e.g., serial bus 112) having a bus line controller (Hooker: e.g., appliance communication controller 104) said bus line controller receiving information pertaining to an appliance status of the domestic appliance, (Hooker: par [0020]);

said bus line controller programmed to allocate (assign) a unique address for identifying the domestic appliance in the local area network (Hooker: e.g., par [0055] and see table 6);

said bus line controller programmed to repeatedly request over time a specified fixed criterion (Hooker: status parameters) of the domestic appliance when the information transmitted contains change information from the domestic appliance regarding the appliance status (Hooker: par [0008, 0067, and 0072]);

said bus line controller configured such that in a presence of the communication connection to the domestic appliance, said bus line controller receiving a reply signal (e.g., acknowledgement (ACK) response) from the domestic appliance (Hooker: [0009-0010, and 0072]); and

said bus line controller containing an evaluation device (Primm: e.g., remote monitoring system 44) configured such that, in an absence of the reply signal (Primm: e.g., not receiving expected ping), said evaluation device providing a message signal

indicating an interruption of the communication connection to the domestic appliance (Primm: par [0061]), and

said bus line controller being constructed so that in response to the message signal, said bus line controller carries out a search operation (Roy: e.g., device discovery task/device location protocol) for the domestic appliance wherein a general interrogation signal (request) is transmitted until the reply signal (Roy: e.g., process responses until no more responses are received) is obtained from the domestic appliance again (Roy: par [0012], and see fig.2), and said bus line controller is further constructed such that said bus line controller then allows information (Roy: e.g., SNMP information includes device name, model, and status, par [0026]) corresponding to a then valid current appliance status to be received (Roy: par [0044], and see fig.6 and fig.7).

Regarding Claim 17, the combined teachings of Hooker/Primm/Roy teach the device according to claim 16, as described above. The combined teachings of Hooker/Primm/Roy further teach wherein said bus line controller is a controller which cyclically requests the specified fixed criterion of the domestic appliance (Hooker: (par [0008, 0067 and 0072])).

Regarding Claim 18, the combined teachings of Hooker/Primm/Roy teach the device according to claim 16 as described above. The combined teachings of Hooker/Primm/Roy further teach wherein said bus line controller is a controller which

cyclically repeatedly requests the appliance status of the domestic appliance (Hooker: (par [0008, 0067 and 0072])).

Regarding Claim 19, the combined teachings of Hooker/Primm/Roy teach the device according to claim 16 as described above. The combined teachings of Hooker/Primm/Roy further teach wherein said bus line controller is a controller which cyclically carries out the search operation (Roy: e.g., process is repeated, par [0012]).

Regarding Claim 20, the combined teachings of Hooker/Primm/Roy teach the device according to claim 16 as described above. The combined teachings of Hooker/Primm/Roy further teach wherein said bus line controller is configured such that before receiving the appliance status of the domestic appliance, said bus line controller performs a registration procedure (Roy: e.g., information is extracted from the various network devices and the devices are then added to a list, par [0027] and [0045]) by which the domestic appliance obtains the unique address (Roy: IP address) in the local area network by which it can be reached in the local area network (Primm: e.g., interconnected network 32, par [0032] and see fig.2)

Other Pertinent Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Klausner (US 5,839,097) discloses an electrical appliance that can be connected to a bus system supplied to several home appliances and are controlled by a single central computer.

B. Natalini et al. (US 2002/0095269) disclose a system for monitoring and servicing appliances.

C. Compliment et al. (US 5,909,549) disclose a network management system wherein the managed device reestablishes a connection to a management station after detecting a broken connection.

D. Liu et al. (US 2006/0143181) disclose a method of searching for the devices automatically in network.

E. Motoyama et al. (US 2004/0255023) disclose a method and system for extracting vendor and model information in a multi-protocol remote monitoring system.

F. Frietsch (US 2004/0199627) discloses methods and computer program products for carrying out fault diagnosis in an IT network.

G. Ferris (US 7,120,837) discloses a system and method for delayed error handling.

H. Lee et al. (US 2002/0165950) disclose a home appliance networking system and method for controlling the same.

I. West (US 6,618,823) discloses a method and system for automatically gathering information from different types of devices connected in a network when a device fails.

J. Hasegawa et al. (US 6,370,587) disclose a network interconnecting device.

K. Im et al. (US 7,287,062) discloses a home network system and method for operating the same.

L. Yoon et al. (US 2003/0018776) disclose a system and method for controlling home appliances.

M. Gale et al. (US 6,868,509) disclose a method and apparatus for network fault correction via an adaptive fault router.

N. Goodwin, III (US 5,663,963) (referred herein after as Goodwin) discloses a method for detecting and reporting failures in EPL systems.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY MEJIA whose telephone number is (571)270-3630. The examiner can normally be reached on Mon-Thur 9:30AM-8:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-

Art Unit: 2157

8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mejia, Anthony
Patent Examiner

/Salad Abdullahi/

Primary Examiner, Art Unit 2157